

Exercise

(a) The slope of this line is

Multiple Choice:

- (i) positive because y is increasing
- (ii) positive because y is decreasing
- (iii) negative because y is increasing
- (iv) negative because y is decreasing \checkmark
- (b) The slope of this line is $m = \boxed{-3/2}$.

Hint: Recall that the slope of the line is the rate of change between any two data points on the line, $m=\frac{\Delta y}{\Delta x}$.

- (c) The y-value of the point corresponding to x = 0 is $b = \boxed{1/2}$.
- (d) The point-intercept form of the equation of this line is $y = \boxed{-3/2}x + \boxed{1/2}$.
- (e) The point-slope form of the equation of this line is $y-2 = \boxed{-3/2} \left(x \boxed{-1}\right)$.
- (f) The equation of this line in standard form 3x + 2y = 1.